

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1. - 8. (Cancelled)

9. (New) Fuel cell, generating electric power from oxygen and hydronium ions, and comprising an anode, a magnetic cathode comprising an active layer, a proton electrolyte between the anode and the cathode, and a network of permanent magnets having magnetic axes perpendicular to a plane interface between the electrolyte and the active layer, the magnets comprising a first pole and a second pole, fuel cell wherein the first and second poles of the magnets of the network are respectively arranged in the active layer and in the electrolyte.

10. (New) Fuel cell according to claim 9, wherein the interface between the electrolyte and the active layer is arranged substantially at equal distance from the first and second poles of the magnets.

11. (New) Fuel cell according to claim 9, comprising a support network, comprising apertures wherein the magnets are arranged, and passages for the hydronium ions and the oxygen.

12. (New) Fuel cell according to claim 11, wherein the support network is made of non-magnetic material, fixed onto the electrolyte.

13. (New) Fuel cell according to claim 9, wherein the magnets comprise an anti-corrosive coating.

14. (New) Fuel cell according to claim 13, wherein the anti-corrosive coating is made of platinum or gold.

15. (New) Fuel cell according to claim 9, wherein the magnets are distributed in a plane parallel to the interface between the electrolyte and the active layer with a periodic distribution.

16. (New) Fuel cell according to claim 9, wherein the magnets are distributed in a plane parallel to the interface between the electrolyte and the active layer with a fractal type distribution.